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PLEASE AMEND THIS APPLICATION AS FOLLOWS:

In The Claims:

Amend claims 48, 77, 100, 102 and 132 as follows:

48. (Thrice Amended) A composition of matter comprising:

a transparent non-porous or translucent non-porous system containing a fluid or solution, which system comprises:

- a solid support; and (i)
- a double-stranded oligonucleotide or polynucleotide which is directly or indirectly fixed or immobilized to said solid support wherein one of the strands (produces a quantifiable soluble signal generated or generatable from] comprises a chemical label or labels [which comprise a signalling moiety or moieties.]; and
- a signalling entity which is quantifiable in solution.
- 77. (Thrice Amended) A composition of matter comprising:

a transparent non-porous or translucent non-porous system containing a fluid or solution, which system comprises:

a double-stranded oligonucleotide or polynucleotide which is directly or indirectly fixed or immobilized to said system wherein one of the strands [hoduces a quantifiable soluble signal generated or generatable from comprises a chemical label or labels [which comprise a signalling moiety or moieties.] ; and

a signalling entity which is quantifiable in solution.

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100. (Thrice Amended) An apparatus comprising:

- 1) one or more solution containing means, each comprising a transparent non-porous or translucent non-porous device;
- 2) means for forming a fixed or immobilized double-stranded oligonucleotide or polynucleotide hybrid to a solid support in said device, said hybrid comprising a chemical label or labels attached to one strand of said hybrid[, said label or labels comprising a signalling moiety of moieties which are capable of generating a quantifiable soluble signal and
- 3) means for producing a quantifiable soluble signal generatable or generated from said chemical label or labels which comprise said signalling moiety or moieties] signalling entity which is quantifiable in solution.

102. (Thrice Amended) A transparent non-porous or translucent non-porous system containing a fluid or solution, which system comprises:

oligo- polynucleotide sequence, [said oligonucleotide or polynucleotide in double-stranded form producing a quantifiable or detectable soluble signal generated or generatable from a chemical label or labels which comprise a signalling moiety or moieties; and] wherein one of the strands in said hybrid comprises a chemical label or labels;

(ii) a signalling entity which is quantifiable in solution; and

[(ii)] (iii) a solid support having directly or indirectly fixed or immobilized thereto said oligo- or polynucleotide sequence or said oligonucleotide or polynucleotide (i).

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132. (Twice Amended) An apparatus comprising:

- 1) means for retaining or containing a fluid or solution;
- 2) one or more transparent non-porous or translucent non-porous devices, each comprising a solid support;
- 3) means for fdrming a fixed or immobilized oligonucleotide or polynucleotide hybrid to said solid support, said hybrid comprising a chemical label or labels attached to said hybrid[, said label or labels further comprising a signalling moiety or moieties capable of generating a soluble signal];
- 4) means for locantifying a soluble signal generatable or generated from said chemical label or labels comprising said signalling moiety or moieties] producing a signalling entity which is quantifiable in solution; and
 - 5) fluid or solution.